REMARKS

In the Office Action mailed April 3, 2006, Claims 1-30 are rejected under 35 USC §102(b) as being anticipated by Levi et al. (U.S. Patent 6,363,517, "Levi"). Applicants gratefully acknowledge the telephone conference with the Examiner on July 11, 2006. Applicants have amended the claims consistent with the Examiner's suggestions and believe that the claims are in a condition for allowance.

In response to the rejection, Applicants have amended each of the independent claims to more clearly distinguish over Levi. In particular, Applicants have amended each independent claim to include a plurality of systems under test where each system under test has a different programmable logic device architecture. Applicants submit that the claims as amended clearly distinguish over Levi. Levi is directed to a system for evolving configuration bitstreams for a programmable logic device. The process of Levi evolves a design of a programmable logic device by creating a population of designs to meet design requirements. The population of designs is first randomly created, and then tested, and scored based on the suitability to meet the design requirements. Then certain ones of the designs in the population are selected to be used to create new designs for the population.

Levi fails to disclose or suggest a plurality of systems under test having different programmable logic device architectures. Although Fig. 5 of Levi shows a plurality of FPGAs, the FPGAs are necessarily the same architecture. Levi teaches that the evolution of a circuit on a variety of devices overcomes irregularities in device fabrication, operating temperatures, operating voltage and other environmental factors which may affect the performance of a circuit. (Col. 2, lines 30-36). More importantly, Levi expressly teaches that when an FPGA design is being evolved on several FPGAs in parallel, it is not necessary that the various FPGAs be the same size, but that the various FPGAs have common architectural features so they will respond the same way to the same subset of a bitstream. (Col. 11, lines 46-50). Applicants note that Levi also fails to disclose or suggest a plurality of client devices, as set forth in some of the independent claims which will be described in more detail below. Applicants respectfully submit that the claims as amended clearly distinguish over Levi, and now

refer to the specific language of each independent claim which distinguishes the claim over Levi.

Claim 1

Independent claim 1, which is directed to a client-server verification system, has been amended to include a plurality of systems under test, and in particular, to indicate (i) that each system under test has a different programmable logic device architecture and (ii) that a selected system under test is configured with a circuit design implemented according to configuration data of a test job. The selected system under test receives test vectors of the test job and outputs result vectors to the client computer. Applicants respectfully submit that Levi fails to disclose or suggest the plurality of systems under test as claimed, or that a selected system under test is configured according to configuration data of a test job. Applicants submit that independent Claim 1 as amended, and its dependent claims 2-5, clearly distinguish over Levi, and respectfully request reconsideration of the rejection of the claims.

Claim 6

Independent claim 6 is also directed to a client-server verification system comprising a plurality of client computers and a server. In contrast to Applicants' claim 6, Levi fails to disclose or suggest the plurality of client computers. Although it is suggested in the Office Action that populations can evolve on separate "devices/clients," Applicants respectfully submit that Levi expressly teaches evolving multiple populations using a single microprocessor. In particular, because most of the time in the evolution process of Levi is spent executing several designs, a signle microprocessor in the system of Levi can evolve several designs in parallel in order to speed up the evolution and reduce the time required to find a solution. (Col. 10, lines 63-67).

Applicants have further amended claim 6 to indicate that a plurality of systems under test are coupled to the server, and that each system under test of the plurality of systems under test has a different programmable logic device architecture. Finally, Applicants have amended claim 6 to indicate that a selected system under test of the

plurality of systems under test has a programmable logic circuit which is configured with a circuit design implemented according to configuration data of a test job, receives the test vectors of the test job, and outputs result vectors to the client computer by way of the server. Levi fails to disclose or suggest the plurality of client computers and the plurality of systems under test for the reasons set forth above. Applicants submit that independent claim 6 as amended, and its dependent claims 7-10, clearly distinguish over Levi, and respectfully request reconsideration of the claims.

Claim 11

Independent claim 11 is also directed to a client-server verification system having a plurality of client computers, and further comprises a job distribution server and a server coupled to the plurality of client computers by way of the job distribution server and the system under test. Applicants respectfully submit that Levi fails to disclose or suggest a combination of a job distribution server coupled to the plurality of client computers, and a separate server coupled to the plurality of client computers by way of the job distribution server as claimed. Applicants have also amended claim 11 to indicate that a plurality of systems under test has different programmable logic device architectures to further distinguish Applicants' claims over Levi. Applicants have further amended claim 11 to indicate that a selected system under test receives the test vectors and outputs result vectors to the client computer by way of the server and the job distribution server. Levi fails to disclose or suggest the plurality of client computers and the plurality of systems under test as claimed. Applicants submit that independent claim 11 as amended and its dependent claims also clearly distinguish over Levi, and respectfully request reconsideration of the rejection of claim 11 and dependent claims 12, 13 and 15.

Claim 16

Independent Claim 16 is directed to a method of verifying a semiconductor design by way of a server. Applicants have amended claim 16 to include a step of providing a plurality of systems under test, where each system under test has a

different programmable logic device architecture. Applicants have also amended the remaining steps of configuring a system under test, coupling test vectors to the system under test, receiving an output, and comparing the result vectors to expected result vectors to indicate that they relate to a selected system under test of the plurality of systems under test. Applicants respectfully submit that Levi fails to disclose or suggest a method of verifying a semiconductor design employing a plurality of systems under test which has different programmable logic device architectures. Applicant also submits that Levi fails to disclose or suggest the various steps of the method relating to a selected system under test. Applicants submit that independent claim 16 as amended, and its dependent claims 17-20, also clearly distinguish over Levi, and respectfully request reconsideration of the rejection of the claims.

Claim 21

Applicants have similarly amended the method of verifying a semiconductor design of claim 21 to include a step of providing a plurality of systems under test, where each system under test has a different programmable logic device architecture. Applicants have also amended the remaining steps of reconfiguring a programmable logic device, coupling test vectors, receiving an output comprising result vectors, and comparing result vectors to expected result vectors to relate to a selected system under test. Applicants submit that independent claim 21 as amended, and its dependent claims 22-25, also clearly distinguish over Levi. That is, Levi fails to disclose or suggest a method of verifying a semiconductor design on a selected system under test of a plurality of systems under test having different programmable logic device architectures. Applicants respectfully request reconsideration of the rejection of independent claim 21 and dependent claims 22-25.

Claim 26

Applicants have amended the method of verifying a semiconductor design of claim 26 to include a step of providing a plurality of systems under test, wherein each system under test has a different programmable logic device architecture. Applicants have further amended claim 26 to indicate that the steps of reconfiguring comprises

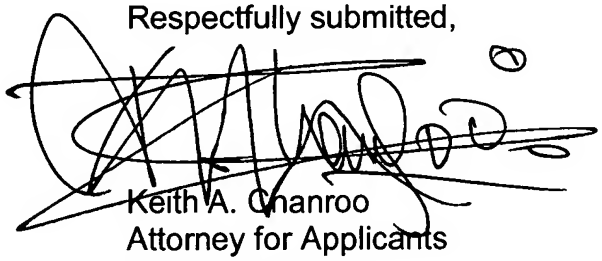
reconfiguring a programmable logic circuit of a selected system under test of the plurality of systems under test. Applicants have further amended claim 26 to indicate that the step of reconfiguring comprises reconfiguring a programmable logic circuit of a selected system under test of the plurality of systems under test with a circuit design according to configuration data of a test job received at the selected system under test by way of a job distribution server. Applicants have also amended claim 26 to indicate that the step of receiving an output comprises receiving an output comprising result vectors from the selected system under test of the plurality of systems under test. Finally, Applicants have amended claim 26 to indicate that the step of comparing the result vectors comprises comparing the result vectors from the selected system under test to expected result vectors. Levi fails to disclose or suggest a plurality of systems under test having different programmable logic device architectures, or reconfiguring a selected system under test of the plurality of systems under test, for the same reasons set forth above. Applicants submit that independent Claim 26 as amended, and its dependent Claims 27-30, also clearly distinguish over Levi, and respectfully request reconsideration of the claims.

CONCLUSION

All claims should be now be in condition for allowance and a Notice of Allowance is respectfully requested.

If there are any questions, the Applicants' attorney can be reached at Tel: 408-879-7710 (Pacific Standard Time).

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on July 17, 2006.

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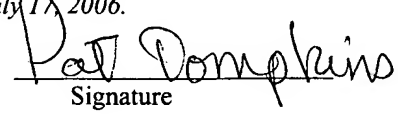

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